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JUN 25 2008
MT Dept. Environmental Quality
Permitting & Compliance Division
Air Resources Management Bureau

Debra Wolfe
Montana Department of Environmental Quality
Helena, MT 59620

RE: 2008 Monitoring Network Plan

Dear Deb:

We appreciate the opportunity to comment on DEQ's 2008 Monitoring Network Plan. We are concerned that the Plan does not properly incorporate state legal requirements and does not provide for meaningful information about Gallatin Valley air quality. It appears that proposed monitoring plans for the Gallatin Valley assume that monitoring for coarse particulates is unnecessary. This could result in an underestimate of impacts to air quality and public health.

Gallatin County is growing rapidly. By any measure it is one of the fastest growing counties in Montana. The U.S. Census estimates Gallatin County's population increased 19.3% between 2000 and 2006. The statewide average is 4.7%. Population growth is nearly always accompanied by increased air pollution. The Gallatin Valley is no exception. The Gallatin Valley is subject to more inversions than nearly any other location in the United States according an MSU scientist who has been studying inversion rates in the valley for years.

While we commend the department for increasing its monitoring of fine particulates, measuring coarse particulates is important as well. According to the EPA, "[s]ources of coarse particles include crushing or grinding operations, and dust from paved or unpaved roads." http://www.epa.gov/ttn/naaqs/pm/pm10_index.html

As DEQ well knows, rapid growth results in increased road building and gravel, asphalt and crushing operations. All of these increased activities consequently lead to increased PM_{10} pollution in the Gallatin Valley. Rapid growth should not be accompanied by weaker monitoring requirements for coarse particulates. Growth related activities are indicators that additional testing is necessary.

Montana law requires monitoring of ambient PM_{10} concentrations. Montana rules say that "[n]o person may cause or contribute to concentrations of PM-10 in the ambient air which exceed the following standards:...(b) Annual average: 50 $\mu g/m3$ of air, expected annual average, not to be exceeded." 17.8.223 Montana Administrative Rules. This law is rendered meaningless if the department simply eliminates monitoring for PM_{10}. In order to ensure compliance with this provision DEQ should resume annual PM_{10} monitoring in all high growth areas, particularly at both the Belgrade and Bozeman sites.

We are concerned that the monitoring site in Gallatin County is inappropriately located. The site for the city of Bozeman lies outside the city limits. This location results in underreporting of ambient PM_{10} concentrations for a number of reasons. First, it is distant from significant sources of PM_{10}. Second, it is near the water treatment plant and adjacent to the river. According to EPA guidelines both of these factors may result in artificially low readings. (EPA-454/R-99-022).

Further, according to EPA, "[t]he most important spatial scale to effectively characterize the emissions of particulate matter from both mobile and stationary sources is the neighborhood scale for $PM_{2.5}$." 40 C.F.R. Pt. 58, App. D § 4.7.1(c). Neighborhood scale measurements should be representative of "conditions in areas where people commonly live and work." Id. § 4.7.1(c)(3). Because the Bozeman water treatment plant does not resemble areas where most people live and work, it does not provide accurate neighborhood scale data. This site should be relocated to an area that will provide meaningful air quality information for the Bozeman area.

Without PM_{10} monitoring, industrial emissions, road dust, and fugitive emissions from gravel pit mining – some of the most significant emissions in the valley – are being ignored. Data from the summer of 2007, when forest fire smoke was severe in the Valley, reveal the inadequacy of current monitoring. During the entire summer, the $PM_{2.5}$ standard was exceeded only twice, and one of those two readings was just barely over the 35 microgram daily limit (35.8). This is a good indication that $PM_{2.5}$ monitoring does not present the whole picture of air quality in the Valley and a PM_{10} monitor is necessary as well.

Another concern is that a significant number of data points for Gallatin Valley air quality have been omitted over the last few years. Ostensibly this has been done for "quality control" reasons. What concerns us is that it appears that most of the deleted data was recorded in the months of December, January, and February, when air inversions create poor air quality conditions. In 1993, about 4% of data was deleted for this reason; after 2000, up to 35% of data from the critical winter months was deleted. During this same period (1993-2006), DEQ charts show PM_{10} steadily declining in the Gallatin Valley. This trend is inconsistent with local observations of air quality. DEQ should investigate and then explain why there has been a significant increase in data being eliminated from consideration due to quality control reasons. Instead of assuming this means that air quality is improving, DEQ should improve the control of this data so it can be used to determine if the loss of this data creates a false representation of air quality in the valley.

Please contact us if you have any questions or need any clarification of these concerns.

Sincerely,

Anne Hedges
Montana Environmental Information Center

Signing for:
Jennifer Swearingen
Montanans Against Toxic Burning

Jenny Harbine
Earthjustice